

In the Claims:

Please amend the claims as follows:

1. (currently amended) A wireless controller ~~(4)~~ for controlling-and/or monitoring a device ~~(15)~~ arranged relative an industrial robot ~~(16)~~, ~~characterised by comprising~~ wireless communication means including a processor ~~(6)~~ arranged with communication function means ~~(10)~~ for handling wireless communication to and from said device and control means ~~(3)~~ for carrying out at least one control function for one or more actuators of said device.
2. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means ~~(3)~~ are comprised in part as one or more computer programs executable by means of said processor that handles the wireless communication functions.
3. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means ~~(3)~~ is further arranged to process a signal from at least one sensor arranged with said device.
4. (currently amended) A The wireless controller according to claim 1, wherein any of ~~claims 1-3, characterised in that~~ it comprises a configurable hardware I/O interface ~~(9)~~.
5. (currently amended) A The wireless controller according to claim 4, ~~characterised in that wherein~~ the hardware input/output means ~~(9)~~ of the wireless controller are integrated in the

same unit as said processor.

6. (currently amended) ~~A~~ The wireless controller according to claim 1, ~~characterised in that~~ wherein the control means ~~(3)~~ further comprises program means for receiving and/or storing operational data of said device.

7. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the wireless controller comprises memory means ~~(7)~~ for storage of operational data.

8. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the control means further comprises computer program means ~~(3, 22)~~ for processing the operational data of said device.

9. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the control means further comprises output means for communicating data dependent on the stored operational data to a display means.

10. (currently amended) ~~A~~ The wireless controller according to claim 6, ~~characterised in that~~ wherein the output means for communicating the stored operational data comprises an embedded web server.

11. (currently amended) ~~A~~ The wireless controller according to claim 9, ~~characterised in that~~ wherein the output means of the control means is configured to communicate the stored

operational data via the wireless communication means (10,11).

12. (currently amended) A The wireless controller according to claim 9, ~~characterised in that wherein~~ the output means of the control means may be configured to communicate with a supervisory robot control system using a message sent via any of the list of: SMS, a web address, a phone, a second robot control unit.

13. (currently amended) A The wireless controller according to claim 9, ~~characterised in that wherein~~ the output means of the control means is configured to send a communication to a human operator via any of a list of: SMS, a web address, a network address, a phone, a control unit.

14. (currently amended) A The wireless controller according to claim 1, ~~characterised in that wherein~~ the control means further comprises a control loop for receiving an input signal from a high level control system and generating a control signal to said device dependent on the input signal from the high level control system.

15. (currently amended) A The wireless controller according to claim 14, ~~characterised in that wherein~~ input/output signals of the control loop of the control means are compatible with a high level language.

16. (currently amended) A The wireless controller according to claim 6, ~~characterised in that wherein~~ the wireless controller comprises additional processor means (30) for receiving

and/or storing operational data of said device (15).

17. (currently amended) A The wireless controller according to claim 1, ~~characterised~~ by further comprising wireless communication means (10, 11) configured to operate according to a standard compatible issued by the Bluetooth SIG Inc.

18. (currently amended) A The wireless controller according to claim 17, ~~characterised~~ ~~in that~~ wherein wireless communication functions means (10) comprises protocol stack handling for both incoming and outgoing communications.

19. (currently amended) A The wireless controller according to claim 17, ~~characterised~~ by wherein handling wireless communication transmitted according to a protocol that emulates a serial transmission line.

20. (currently amended) A The wireless controller according to claim 1, ~~characterised~~ by further comprising means (19, 1, 10, 3) for providing wireless I/O functions between the robot control unit (18) and said device (15) arranged on or in relative proximity to the industrial robot (16).

21. (currently amended) A method for wireless control and/or monitoring of a device (15) arranged relative an industrial robot (16), ~~characterised by~~ comprising:  
-sending a wireless signal (44) from a robot control unit (18) to said device mounted on or arranged in conjunction with said robot,

- receiving the signal by means of a wireless controller (1) arranged mounted on-or in conjunction with said device (15),
- processing the wireless signal in a processor (6) of the wireless controller,
- generating a second control signal (46) in the processor (6) and sending it to said device (15).

22. (currently amended) A The method according to claim 21, characterised by further comprising sending (47) the second control signal by means of a hardware I/O interface (9) of the wireless controller (1).

23. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-22, characterised by~~ storing operational data for said device in a memory means (7) of the wireless controller.

24. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-23, characterised by~~ storing in-signals and result signals sent out in a memory means (7) of the wireless controller.

25. (currently amended) A The method according to claim 21, further comprising any of ~~claims 21-24, characterised by~~ processing operational data and providing for a web client or a thin client data comprising any from the list of: signals, results, number of complete cycles, cycle time, statistical information, alarms.

26. (currently amended) A The method according to claim 21, further comprising any of

~~claims 21-25, characterised by providing operational data for a display means (20).~~

27. (currently amended) A The method according to claim 21, further comprising any of  
~~claims 21-23, characterised by~~ providing diagnostic information based on the operational data.

28. (currently amended) A The method according to claim 27, ~~characterised by~~ further  
comprising providing the diagnostic information arranged compatible with a web client or a thin  
client.

29. (currently amended) A The method according to claim 28, ~~characterised by~~ further  
comprising providing the diagnostic information arranged compatible with a web browser or  
telephone adapted web browser format including from the list of : XML, HTML, WML,  
WBXML.

30. (currently amended) A The method according to claim 27, ~~characterised by~~ further  
comprising providing the diagnostic information arranged compatible with a Java applet.

31. (currently amended) A The method according to claim 21, further comprising any of  
~~claims 21-30, characterised by~~ downloading operational information and/or configuration data  
stored in the wireless controller to a second wireless controller and/or second device neither of  
which are mounted on the robot.

32. (currently amended) A The method according to claim 21, further comprising any of

~~claims 20-21, characterised by~~ providing wireless I/O functions between the robot control system (18) and the device (15) arranged on or in relative proximity to the industrial robot (16).

33. (currently amended) Use of a device according to claim 1 ~~any of claims 1-20~~ to control and/or monitor a device (15) arranged with an industrial robot (16) to carry out the operation of any one from the list of: welding, soldering, riveting, painting, gluing, folding plate, bending plate, hemming plate, gripping an object, manipulating an object.

34. (currently amended) Use of a device according to claim 1 ~~any of claims 1-20~~ to configure and/or calibrate a second wireless controller and/or a second device prior till use with a robot.

35. (currently amended) Use of a wireless controller according to claim 1 ~~any of claims 1-20~~ by a human operator to control and/or monitor a device (15) arranged with an industrial robot (16).

36. (currently amended) Use of a wireless controller according to claim 1 ~~any of claims 1-20~~ by means of a process running on one or more computers to supervise and/or control a device arranged with an industrial robot (16).

37. (currently amended) A computer program comprising computer code means and/or software code portions for making a computer or processor perform the steps of a method according to ~~any of claims 21-31~~ claim 21.

38. (currently amended) ~~A~~ The computer program product according to claim 37 comprised in one or more computer readable media.

39. (currently amended) A graphical user interface for controlling and/or monitoring and a device ~~(15)~~ arranged relative an industrial robot ~~(16)~~, ~~characterised in that~~ wherein a display for operational data of the device ~~(15)~~ is provided by a wireless controller ~~(1)~~ according to ~~any of~~ ~~claims 1-20~~ claim 1.

40. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values are provided by means of an embedded web server comprised in the control means ~~(3)~~ of the wireless controller.

41. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values displayed are combined with a graphical representation of a relevant production cell or part thereof.

42. (currently amended) ~~A~~ The graphical user interface according to claim 39, ~~characterised in that~~ wherein the operational data values displayed are arranged to be displayed upon activation of a part of the graphical representation of the relevant production cell or part thereof using a computer mouse, joystick, touch screen or similar computer display selection means.



43. (currently amended) A wireless controller (1) for controlling and/or monitoring a device (15) arranged relative an industrial robot (16), characterised by comprising wireless communication means including a processor (6) arranged with

- communication function software means (10) for handling a wireless protocol stack for communication to and from said device, and
- control means (3) for carrying out at least one control function for one or more actuators of said device.